

STEREO INTEGRATED AMPLIFIER

KA-2060R/3060R

SERVICE MANUAL

KENWOOD

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B51-4863-00(K) 2710

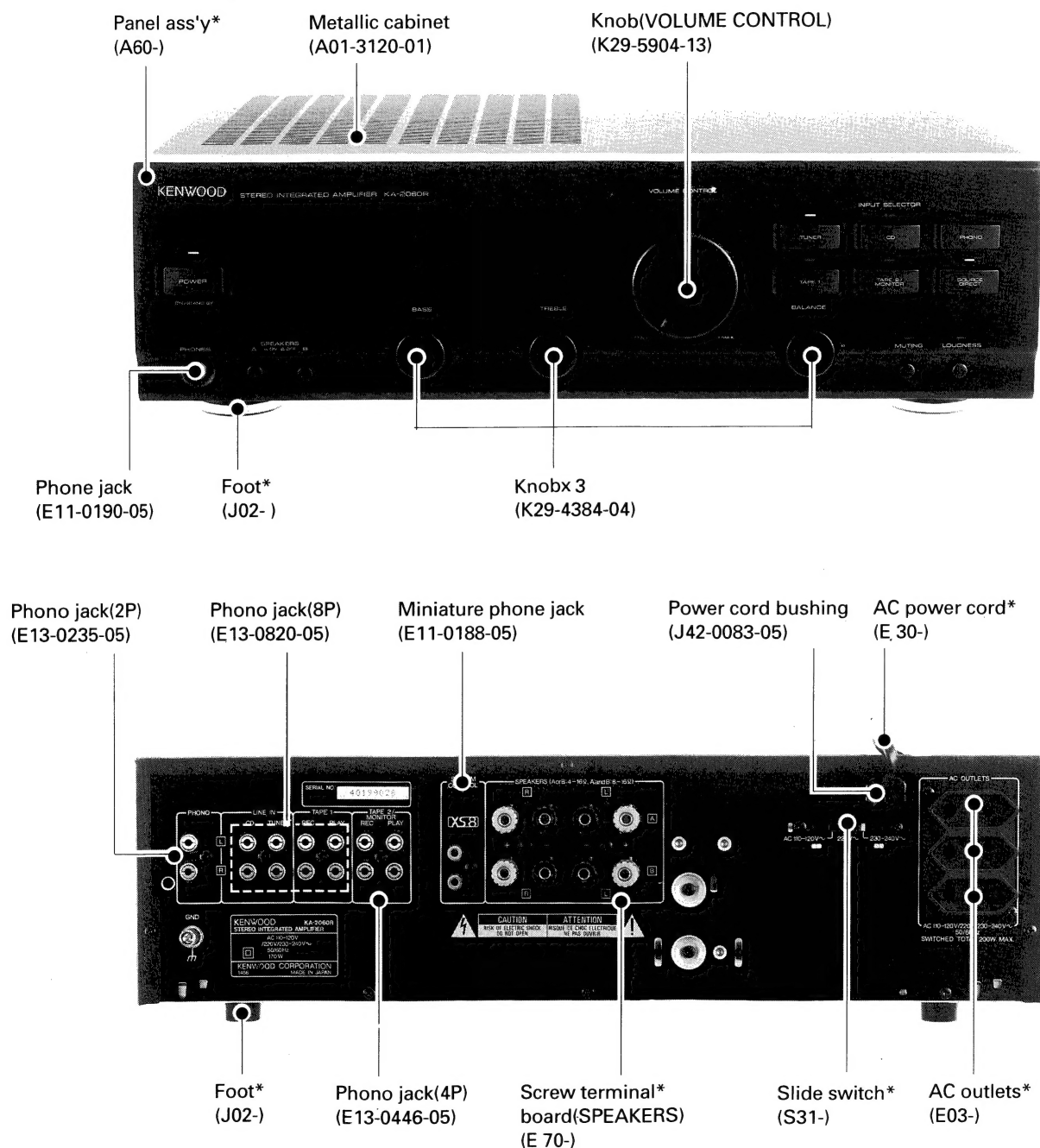


Photo is KA-2060R.

*Refer to parts list on page 16.

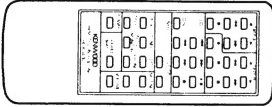
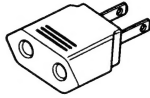
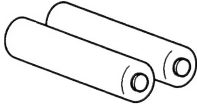
Caution : Signal ground floats from chassis ground. Please connect the cold lead of tester or oscilloscope to the cold terminal of speaker or input jack if check and/or measure the voltage.(Don't connect ground of unit.)

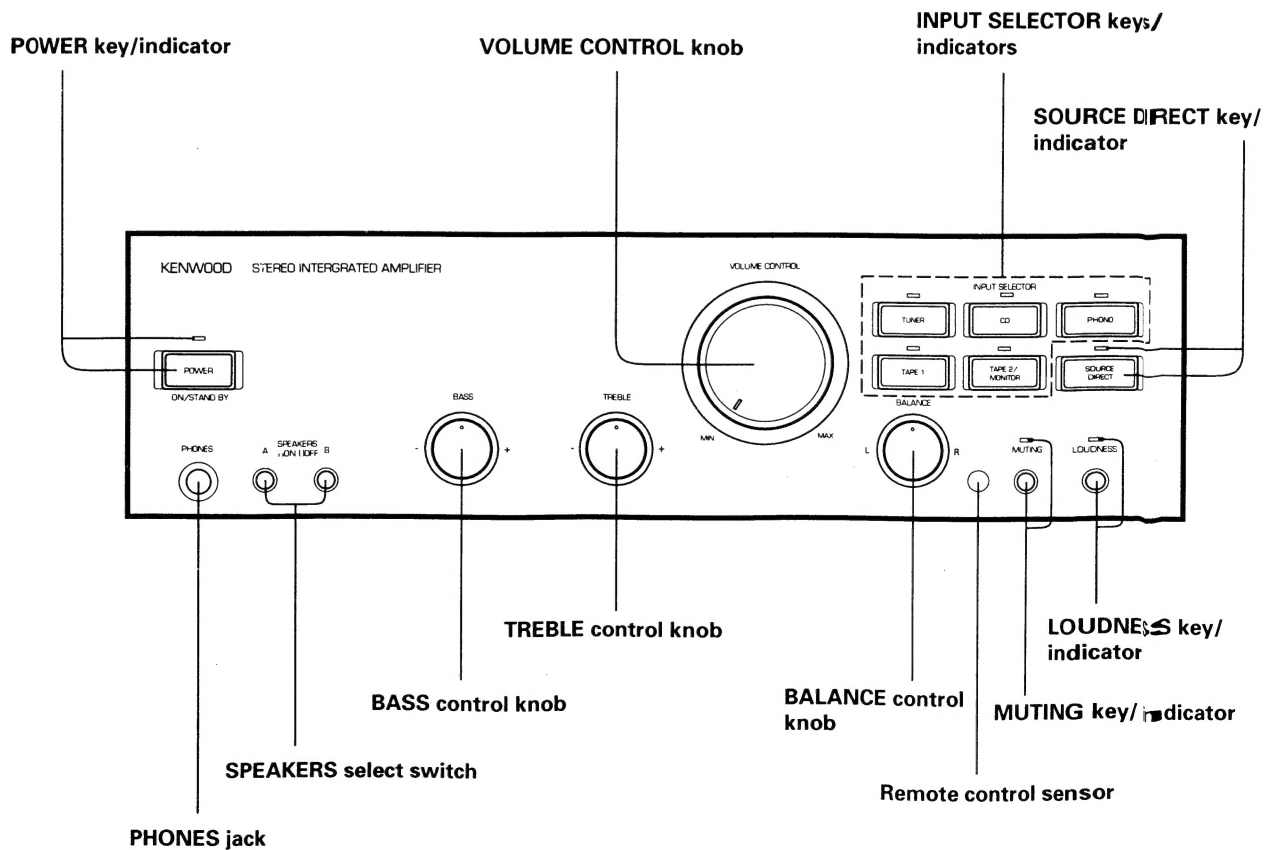
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For remote control and new M- con M37470M4 - 189SP
(X09 : IC4), Please refer to the manual of KA - 4060R.

Accessories

<ul style="list-style-type: none"> Remote control unit 1 (A70 - 0979 - 05) Battery cover : (A09 - 0159 - 08) 	<ul style="list-style-type: none"> AC plug adaptor 1 (Except for U. K., Australia and Europe) For the unit with a European AC plug in areas other than Europe. (E03 - 0115 - 05) 
<ul style="list-style-type: none"> Batteries (R03 / UM - 4 / "AAA") 2 (-) 	

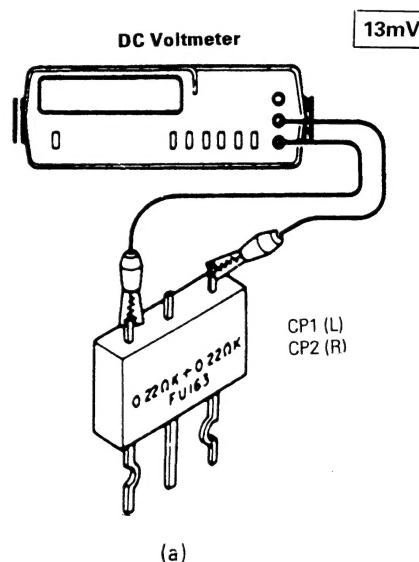


ADJUSTMENT

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, set the respective switches as follows : POWER : ON SPEAKER : B REC OUT : OFF SELECTOR : PHONO							
1	IDLE CURRENT (KA-2060R)	—	Connect a DC voltmeter across TP 5, 6(L) TP 3, 4(R) (X09-)	VOLUME : 0	VR1 (L) VR2(R) (X09 -)	13mV	(a)
1	IDLE CURRENT (KA-3060R)	—	Connect a DC voltmeter across CP1(L) CP2(R) (X09-)	VOLUME : 0	VR1 (L) VR2(R) (X09 -)	13mV	(a)

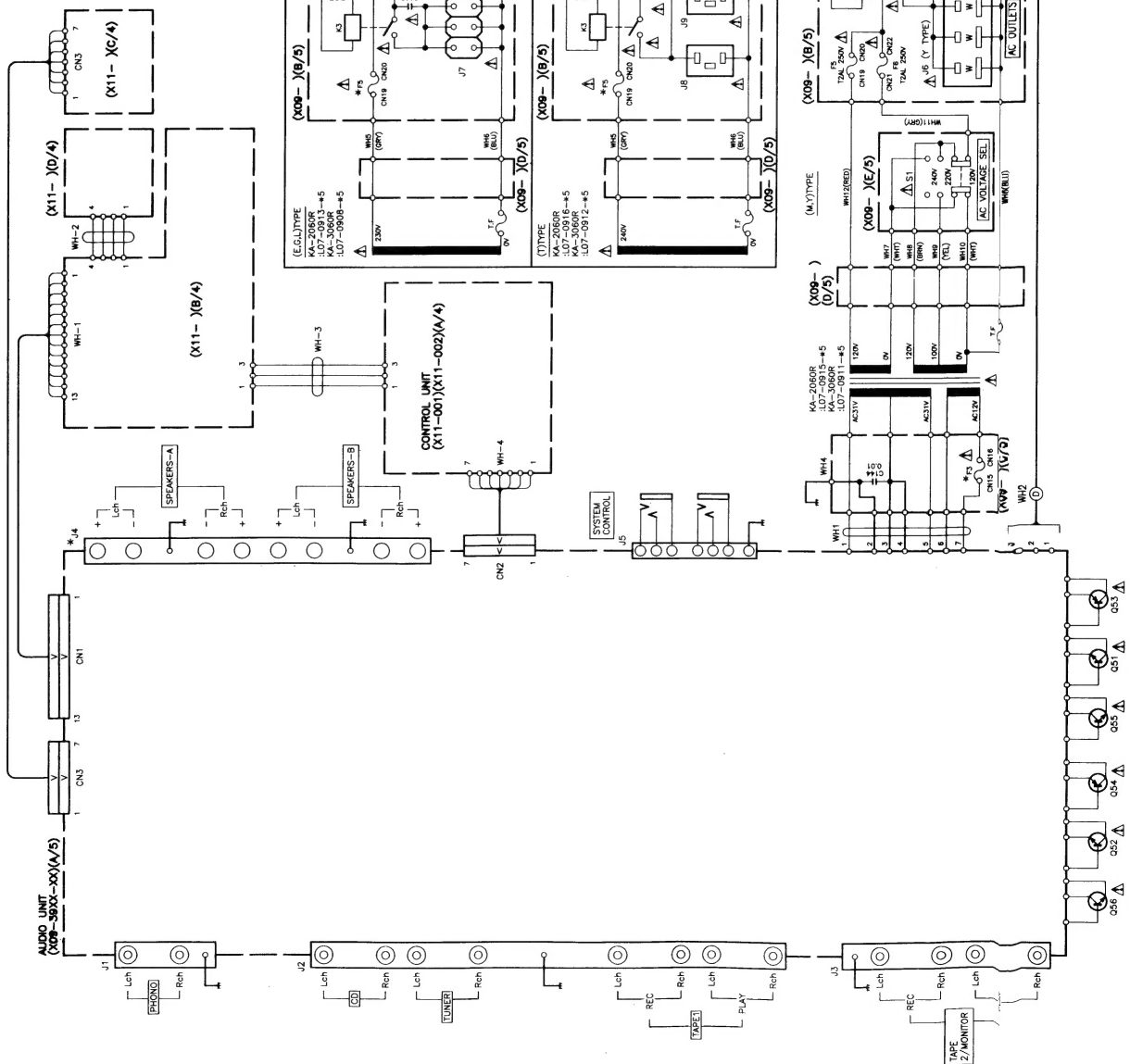
Caution : Signal ground floats from chassis ground.
Please connect the cold lead of tester or oscilloscope to the
cold terminal of speaker or input jack if check and / or
measure the voltage.
(Don't connect ground of unit.)



KA-2060R/3060R

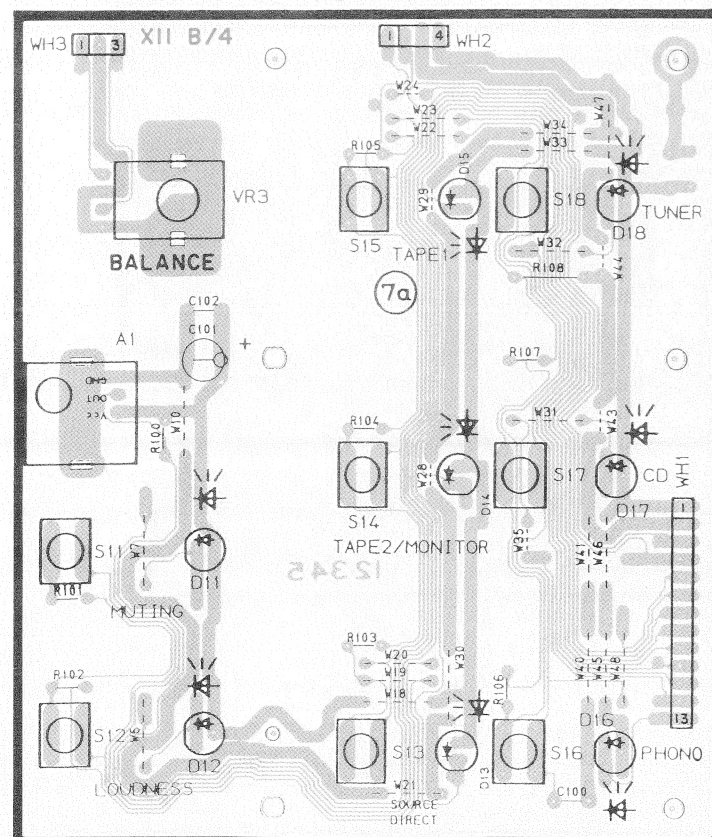
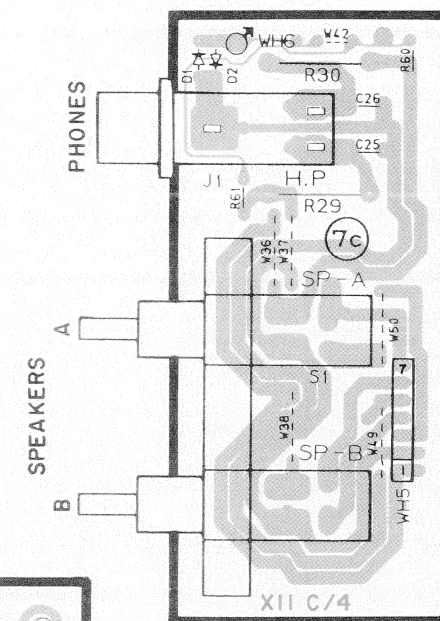
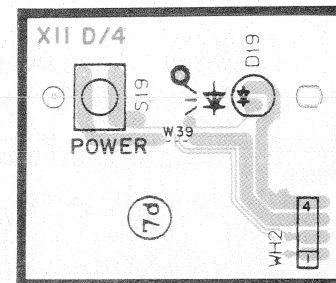
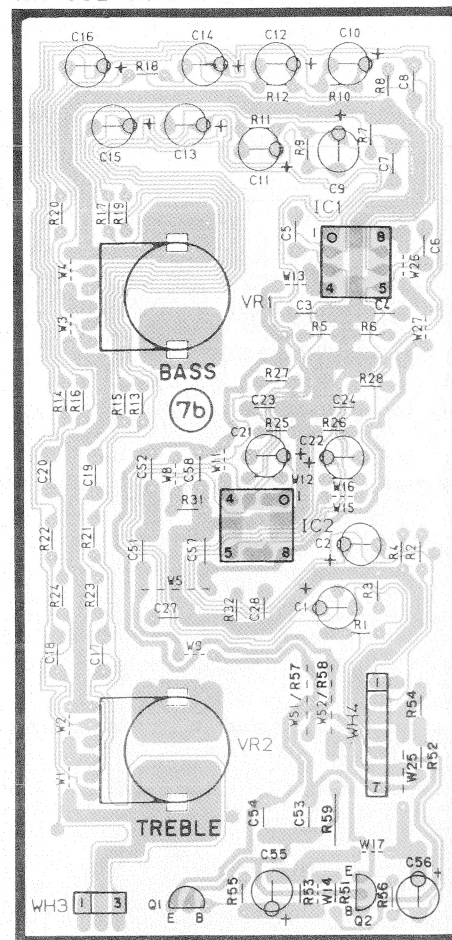
WIRING DIAGRAM

MODEL NAME	DESTINATION	COUNTRY	UNIT NAME	F3	F5	K1	RELS	4
M-2000R	CANADA	GENERAL MARKET	P 000-3060-21	1A 250V	5A 120V	5S1-2052-05	33	
		U.K.	T 000-3060-41					
		FRANCE	Y 000-3060-51					
	AUSTRIA	GENERAL MARKET	X 000-3060-51	17A 250V	72A 250V	5S1-2004-05	56	070-0018-05
		U.K.	T 000-3060-41					
		GERMANY	G 000-3062-70					
M-5000R	CANADA	GENERAL MARKET	P 000-3061-21	1A 250V	5A 120V	5S1-2052-05		070-0018-05
		U.K.	T 000-3060-41					
		FRANCE	Y 000-3060-51					
	AUSTRIA	GENERAL MARKET	X 000-3061-51	17A 250V	72A 250V	57A-0015-05	33	070-0018-05
		U.K.	T 000-3060-41					
		GERMANY	G 000-3062-70					
M-5000R	CANADA	GENERAL MARKET	P 000-3081-21	1A 250V	5A 120V	5S1-2052-05		070-0018-05
		U.K.	T 000-3080-41					
		FRANCE	Y 000-3080-51					
	AUSTRIA	GENERAL MARKET	X 000-3081-51	17A 250V	72A 250V	57A-0015-05	33	070-0018-05
		U.K.	T 000-3080-41					
		GERMANY	G 000-3082-70					
M-5000R	CANADA	GENERAL MARKET	P 000-3081-21	1A 250V	5A 120V	5S1-2052-05		070-0018-05
		U.K.	T 000-3080-41					
		FRANCE	Y 000-3080-51					
	AUSTRIA	GENERAL MARKET	X 000-3081-51	17A 250V	72A 250V	57A-0015-05	33	070-0018-05
		U.K.	T 000-3080-41					
		GERMANY	G 000-3082-70					



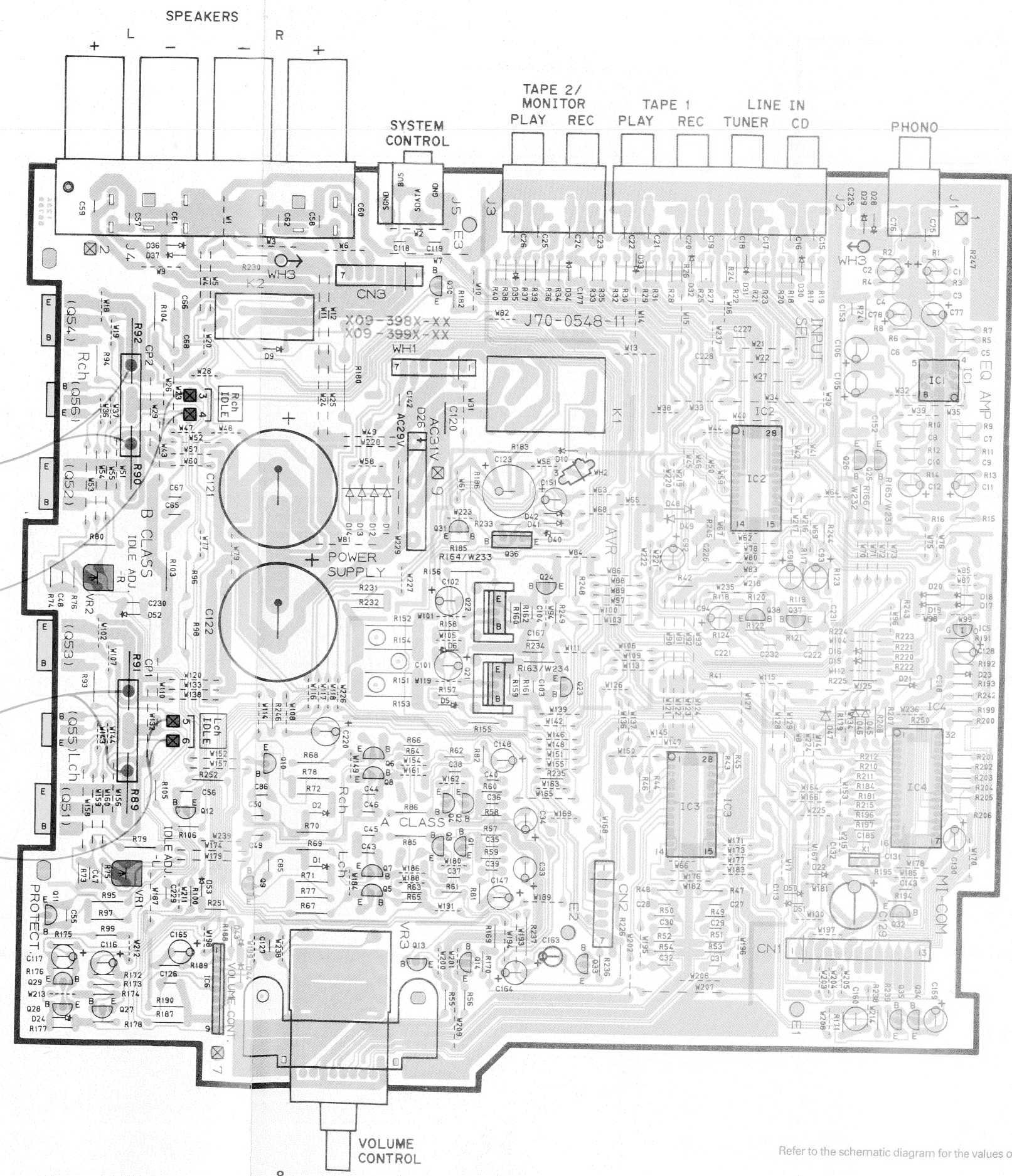
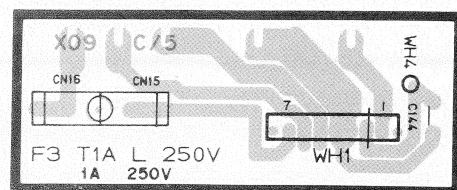
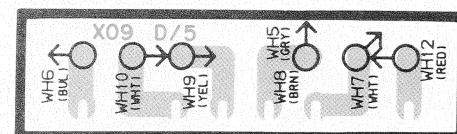
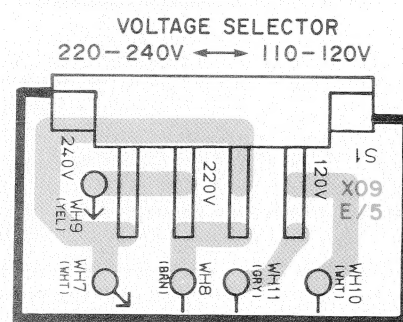
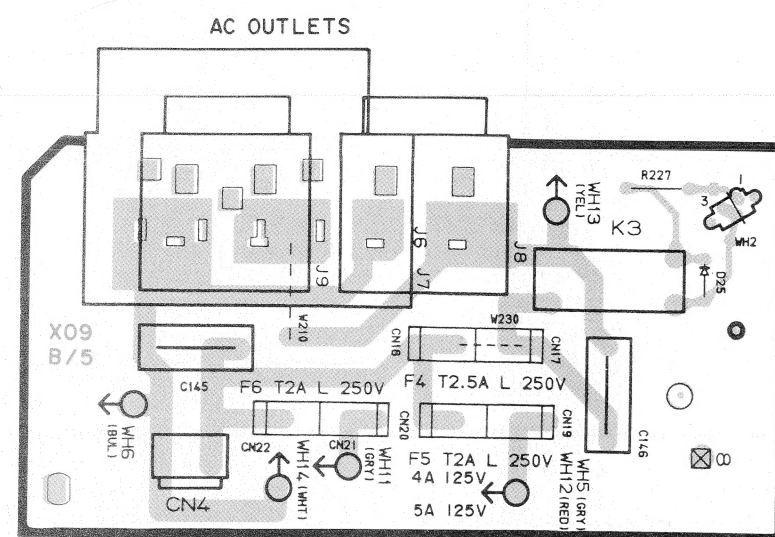
PC BOARD(Component side view) CONTROL UNIT(X11-00X)

X11-001
X11-002 A/4



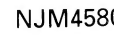
Refer to the schematic diagram for the values of resistors and capacitors.

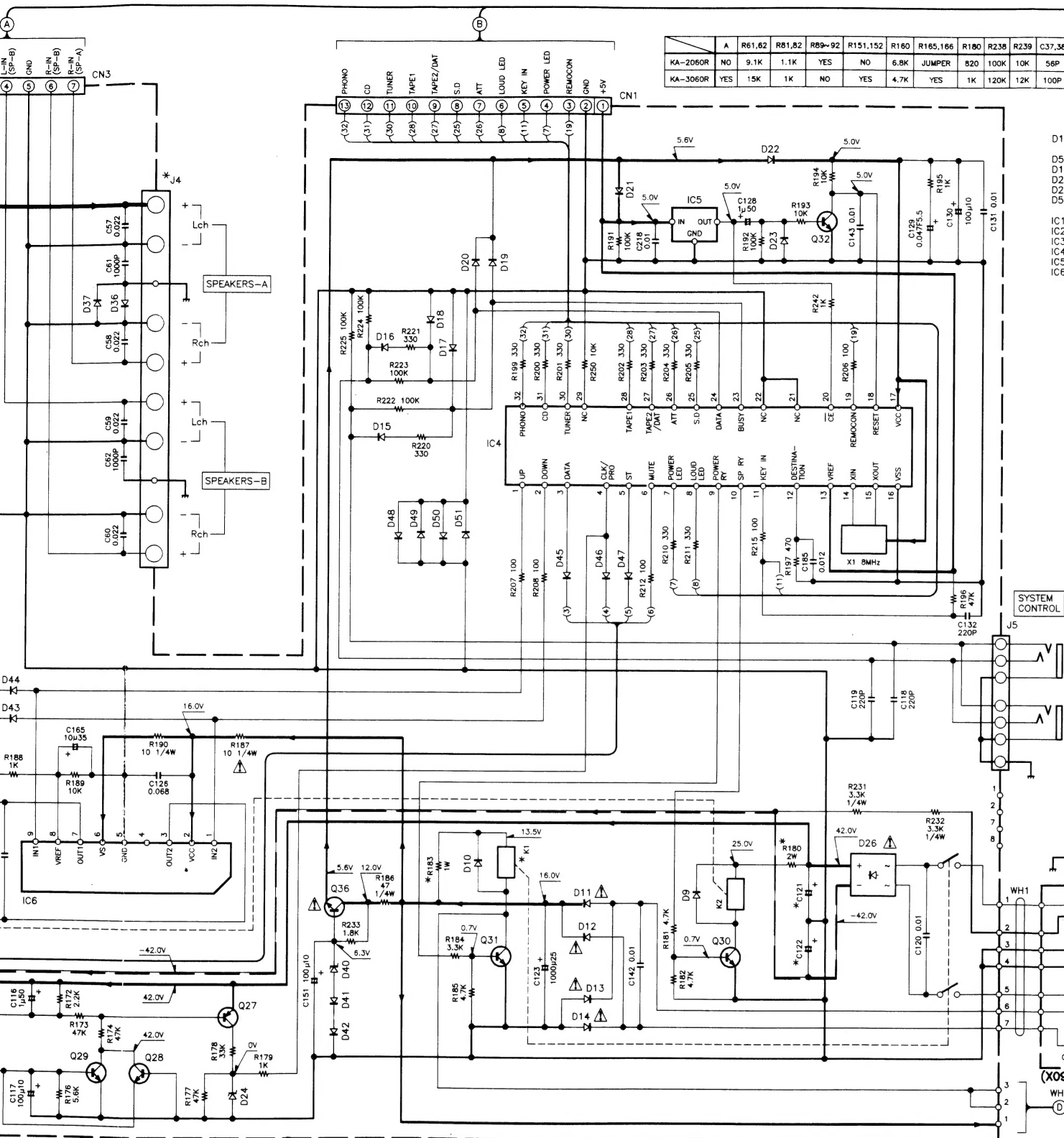
PC BOARD (Component side view) AUDIO UNIT(X09-39XX-XX)



- DC voltmeter KA-3060R Rch (a) Idle current : 13mV
- DC voltmeter KA-2060R Rch (a) Idle current : 13mV
- DC voltmeter KA-3060R Lch (a) Idle current : 13mV
- DC voltmeter KA-2060R Lch (a) Idle current : 13mV

Refer to the schematic diagram for the values of resistors and capacitors.





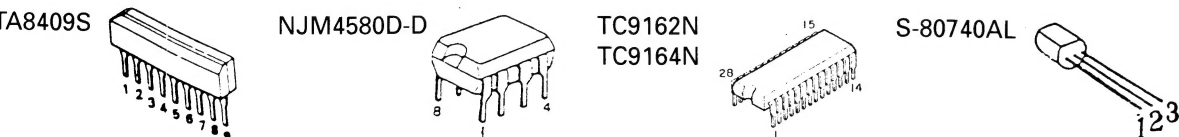
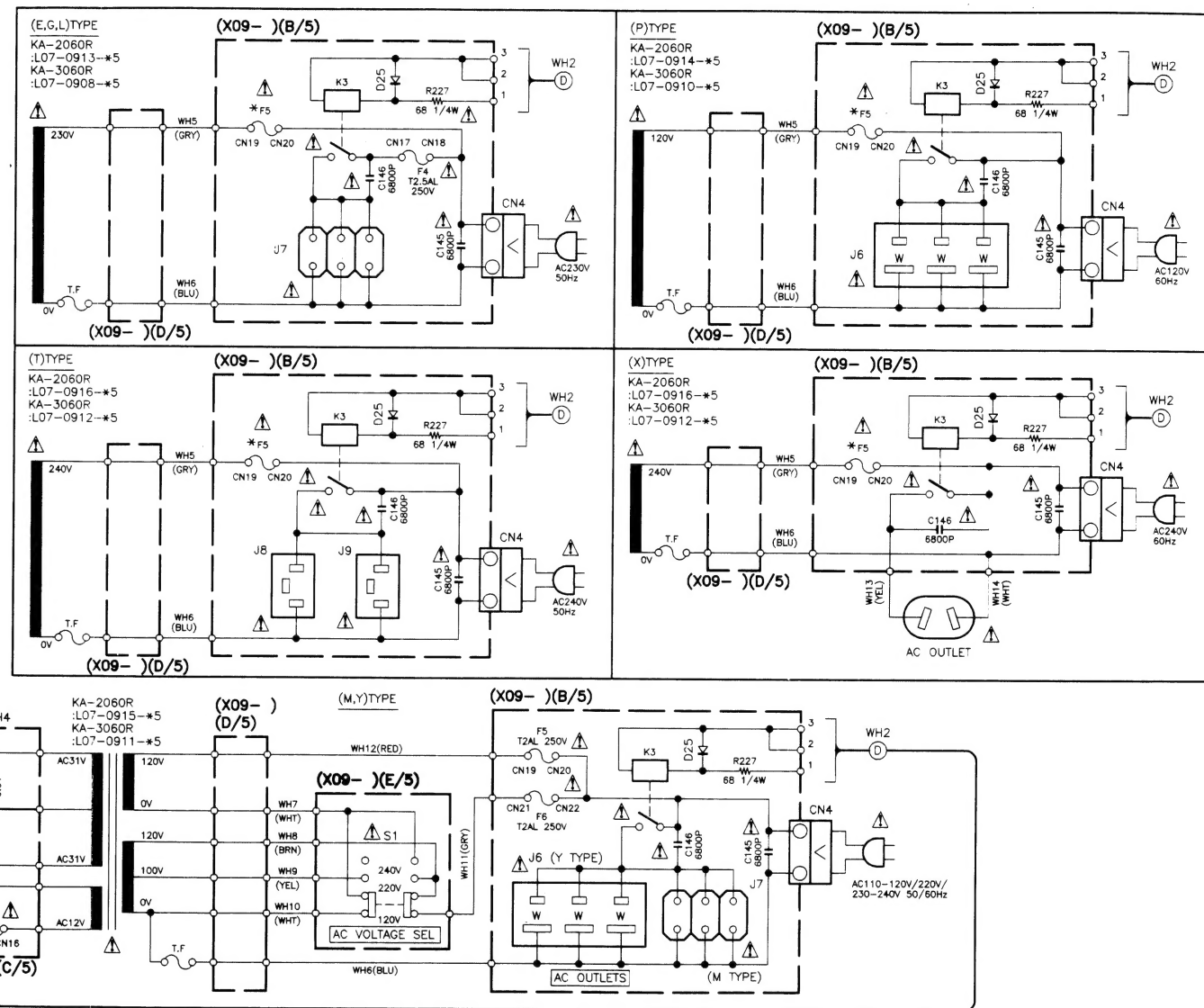
	A	R61,62	R81,82	R89-92	R151,152	R160	R165,166	R180	R238	R239	C37,38	C43,44	C85,86	C101,102	C121,122	C220	TP3-6	CP1,2	D5,6	Q22	Q51,52	Q53,54
KA-2060R	NO	9.1K	1.1K	YES	NO	6.8K	JUMPER	320	100K	10K	56P	120P	330P	100μ50	4700μ50	1μ100	YES	NO	RD15J5(B) or HZ51S5(B)	2SB1370(E,F)	2SD2340BT#5	2SB1531BT#5
KA-3060R	YES	15K	1K	NO	YES	4.7K	YES	1K	120K	12K	100P	100P	220P	10μ50	6800μ50	10μ100	NO	YES	RD20J5(B2) or HZ520S(B2)	2SB1370(E,F) or 2SB1375	2SD2254BT#5	2SB1492BT#5

D1,2,9,10,15~23,25,28~37,41~51
 D5,6 : 1SS133 or HSS104
 D11~14 : S5688B
 D24,40 : RD5.1J5(B2) or HZ5.1S5(B2)
 D26 : D55BA20F03
 D52,53 : HSS104A/1SS131

IC1 : NJM4580D-D
 IC2 : TC9164N
 IC3 : TC9162N
 IC4 : M37470M4-189SP
 IC5 : S-80740AL
 IC6 : TA8409S

Q1~4,9~12,24,26,33,37,38
 Q5~8,23,25 : 2SC1845(F,E)
 Q13,14 : 2SC2878(B)
 Q21,36 : 2SD2061(E,F) or 2SD2012
 Q22 : *
 Q27 : 2SA1048(Y,GR) or 2SA1309A(Q,R)
 Q28,29,32 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
 Q30,31 : 2SC2003(L,K)
 Q34 : UN4212 or DTC124ES
 Q35 : UN4112 or DTA124ES
 Q51,52 : *
 Q53,54 : *
 Q55,56 : 2SC4137F19(V,W)

MODEL NAME	DESTINATION	UNIT NAME	F3	F5	K1	R183	J4
KA-2060R	CANADA	P X09-3991-01	1A 250V	4A 125V	S51-2052-05	33	
	GENERAL MARKET	M X09-3990-21					
	PX	Y X09-3992-91					
	U.K.	T X09-3990-51					E70-0018-05
	AUSTRALIA	X X09-3990-71	T1AL 250V	T2AL 250V	S51-2094-05	56	
	EUROPE	E X09-3992-70					
KA-3060R	SCANDINAVIA	L X09-3991-01					E70-0019-05
	CANADA	P X09-3981-01	1A 250V	5A 125V	S51-2052-05		
	GENERAL MARKET	M X09-3980-21					
	PX	Y X09-3982-91					
	U.K.	T X09-3980-51					E70-0018-05
	AUSTRALIA	X X09-3980-71	T1AL 250V	T2AL 250V	S76-0015-05	33	
	EUROPE	E X09-3982-70					
	SCANDINAVIA	L X09-3981-71					E70-0019-05



Signal ground floats from chassis ground. please connect the cold lead of tester or oscilloscope to the cold terminal of speaker or input jack if check / or measure the voltage. (Don't connect ground of unit.)

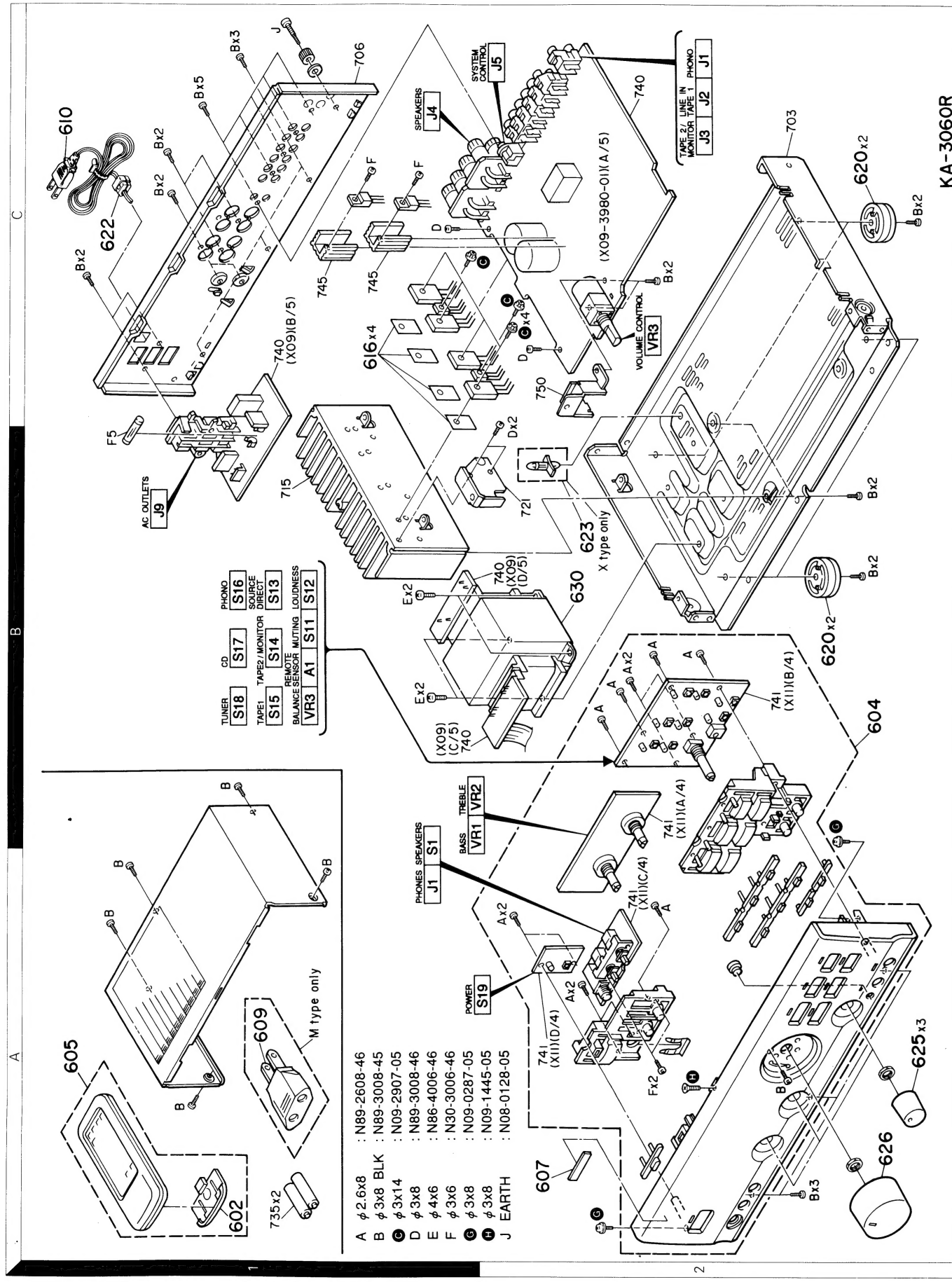
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KA-2060R/3060R
KENWOOD

Y08-5052-70

8	W51, 52	YES	-13.5V	+13.5V
NO			-19.5V	+19.5V



EXPLODED VIEW

KA-2060R/3060R

KA-3060R

Parts with the exploded numbers larger than 700 are not supplied.

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
601	1A	A01-3120-01	METALLIC CABINET		
602	1A	A09-0159-08	BATTERY COVER		
604	2A, 2B	A60-0563-05	PANEL ASSY		
605	1A	A70-0379-05	REMOTE CONTROLLER ASSY		
607	2A	B43-0287-04	KENWOOD BADGE		
-	-	B46-0094-03	WARRANTY CARD		
-	-	B46-0095-03	WARRANTY CARD		
-	-	B46-0096-43	WARRANTY CARD		
-	-	B46-0121-33	WARRANTY CARD		
-	-	B46-0310-03	WARRANTY CARD		
-	-	B58-0513-04	CAUTION CARD (PRESET220-240)		
-	-	B58-0964-03	CAUTION CARD (UL)		
-	-	B58-0965-03	CAUTION CARD (PL PTX TYPE)		
-	-	B58-0966-03	CAUTION CARD (PL ELM TYPE)		
-	-	B58-0970-03	CAUTION CARD (PL R TYPE)		
-	-	B60-1570-00	INSTRUCTION MANUAL (EN)		
-	-	B60-1571-00	INSTRUCTION MANUAL (FR)		
-	-	B60-1572-00	INSTRUCTION MANUAL (D/I)		
-	-	B60-1573-00	INSTRUCTION MANUAL (SP)		
-	-	B60-1574-00	INSTRUCTION MANUAL (C)		
-	-	B60-1675-00	INSTRUCTION MANUAL (G)		
609	1A	E03-0115-05	AC PLUG ADAPTER		
610	1C	E30-2692-15	AC POWER CORD		
610	1C	E30-2650-05	AC POWER CORD		
610	1C	E30-2717-05	AC POWER CORD		
610	1C	E30-2721-05	AC POWER CORD		
610	1C	E30-2739-05	AC POWER CORD		
J9	1B	E03-0141-05	AC OUTLET		
616	1C	F20-1284-05	INSULATING BOARD		
616	1C	F20-1322-05	INSULATING BOARD		
-	-	F20-1401-04	INSULATING BOARD		
-	-	F20-1401-04	INSULATING BOARD		
-	-	H50-1017-04	ITEM CARTON CASE		
-	-	H50-1017-04	ITEM CARTON CASE		
-	-	H50-1020-04	ITEM CARTON CASE		
-	-	H50-1021-04	ITEM CARTON CASE		
-	-	H50-1021-04	ITEM CARTON CASE		
-	-	H50-1022-04	ITEM CARTON CASE		
-	-	H10-5744-02	POLYSTYRENE FOAMED FIXTURE (L)		
-	-	H10-5745-02	POLYSTYRENE FOAMED FIXTURE (R)		
-	-	H12-2194-04	PACKING FIXTURE		
-	-	H13-0156-04	CARTON BOARD		
-	-	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	H25-0382-04	PROTECTION BAG (0232 PRINTED)		
-	-	H25-0651-04	PROTECTION BAG (0232 PRINTED)		
620	2C	J02-1013-05	FOOT		
620	2B	J02-1024-05	FOOT		
620	2B, 2C	J02-1034-05	FOOT		
622	1C	J42-0063-05	POWER CORD BUSHING		

1

* New Parts
Parts without Parts No. are not supplied.
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Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
623	2B	J19-3331-05	UNIT HOLDER		
625	2A	J61-0307-05	WIRE BAND		
626	2A	X29-4384-04	KN08 (BASS/TREBLE/BALANCE)		
630	2B	X29-5904-13	KN08 (VOLUME CONTROL)		
630	2B	L07-0908-05	POWER TRANSFORMER		
630	2B	L07-0910-05	POWER TRANSFORMER		
630	2B	L07-0911-05	POWER TRANSFORMER		
630	2B	L07-0912-05	POWER TRANSFORMER		
630	2B	L07-0913-05	POWER TRANSFORMER		
630	2B	L07-0914-05	POWER TRANSFORMER		
630	2B	L07-0915-05	POWER TRANSFORMER		
630	2B	L07-0916-05	POWER TRANSFORMER		
A	2A, 2B	N89-3008-46	BINDING HEAD TAPITTE SCREW		
B	1A, 1C	N89-3008-45	TAPITTE WITH WASHER M3X14		
C	2C	N89-3008-46	BINDING HEAD TAPITTE SCREW		
D	2C	N89-3008-46	BINDING HEAD TAPITTE SCREW		
E	1B	N86-4006-46	TP HEAD TAPITTE SCREW M3X8		
G	2A, 2B	N09-0287-05	FLAT HEAD SET SCREW M3X8		
H	2A	N09-1445-05	BINDING POST (EARTH)		
J	1C	N08-0128-35	BINDING POST (EARTH)		
AUDIO UNIT(X09-398X-XX)					
C1	2	CE04KW1V100M	ELECTRO		
C3	4	CC45FSL1H101J	CERAMIC		
C5	6	CC45FSL1H681K	CERAMIC		
C7	16	C692FMIH123JEL	MYLAR		
C9	10	C692FMIH332JEL	MYLAR		
C11	12	CE04KW1V100M	ELECTRO		
C15	26	CC45FSL1H151J	CERAMIC		
C27	26	CC45FSL1H151J	CERAMIC		
C29	30	CC45FSL1H331J	MYLAR		
C31	32	C692FMIH683JEL	MYLAR		
C33	34	CE04KW2A010M	ELECTRO		
C35	36	CC45FSL1H101J	CERAMIC		
C37	38	CC45FSL1H101J	CERAMIC		
C39	40	CC45FSL1H101J	CERAMIC		
C43	44	CC45FSL1H101J	CERAMIC		
C45	46	CC45FSL1H121J	CERAMIC		
C47	48	CC45FSL1H103Z	CERAMIC		
C49	50	C692FMIH104JEL	MYLAR		
C55	56	CC45FSL1H222K	CERAMIC		
C57	60	C692FMIH223JEL	MYLAR		
C61	62	CC45FSL1H102K	CERAMIC		
C65	68	C692FMIH104JEL	MYLAR		
C75	76	CC45FSL1H101J	CERAMIC		
C77	78	CE04KW1A101M	ELECTRO		
C85	86	CC45FSL1H221J	CERAMIC		
C91	92	CE04KW2A010M	ELECTRO		
C93	94	CE04KW2A2R2M	ELECTRO		
C101	102	CE04KW1H100M	ELECTRO		
C103	104	C692FMIH104JEL	MYLAR		
C105	106	CE04KW1C470M	ELECTRO		
C113		CC45FSL1H561K	CERAMIC		
C116		CE04KW1C101M	ELECTRO		

2

PARTS LIST

KA-2060R/3060R

L:Scandinavia
Y:PY(Far East, Hawaii)
Y:AAFE(S/Europe)

K:USA
T:England
Y:Australia
M:Other Areas

R:Mexico
G:Germany

2KA-2060R
3KA-3060R

Δ indicates safety critical components.

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2

L:Scandinavia
Y:PY(Far East, Hawaii)
Y:AAFE(S/Europe)

K:USA
T:England
Y:Australia
M:Other Areas

R:Mexico
G:Germany

2KA-2060R
3KA-3060R

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4

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
CN15, 16 CN17, 18 CN19, 20 CN21, 22		J13-0075-05 J13-0075-05 J13-0075-05 J13-0075-05	FUSE CLIP FUSE CLIP FUSE CLIP FUSE CLIP	EGL YM
X1		L78-0290-05	RESONATOR (8MHZ)	
B F	2C 1C, 2A	N89-3008-45 N30-3006-46	BINDING HEAD TAPITE SCREW PAN HEAD MACHINE SCREW	
CP1, 2 R67, 68 R69, 70 R71, 72 R77, 78		R90-0888-05 R014AB2E680JTS R014AB2E472JTS R014AB2E680JTS R014AB2E680JTS	MULTIPLE RESISTOR (0.33X2.5W) FL-PROOF RD 68 J 1/4W FL-PROOF RD 4.7K J 1/4W FL-PROOF RD 68 J 1/4W FL-PROOF RD 68 J 1/4W	
R79, 80 R81, 82 R85, 86 R93, 94 R95, 96		R014AB2E101JTS R014AB2E1001F R014AB2E1003F R014AB2E101JTS R014AB2E392JTS	FL-PROOF RD 100 J 1/4W RN 1.00K F 1/6W RN 100K F 1/4W FL-PROOF RD 100 J 1/4W FL-PROOF RD 3.9K J 1/4W	
R97, 98 R103, 104 R151, 154 R163, 164 R165, 166		R014AB2E102JTS R014AB2E100JTS R014AB2E561JTE R014AB2E2400F R014AB2E3300F	FL-PROOF RD 1.0K J 1/4W FL-PROOF RS 10 J 1W FL-PROOF RS 560 J 2W RN 240.0 F 1/4W RN 330.0 F 1/6W	
R180 R183 R186 R187 R190		RS14DB30102JTE RS14DB3330JTE R014AB2E470JTS R014AB2E100JTS R014AB2E100JTS	FL-PROOF RS 1.0K J 2W FL-PROOF RS 33 J 1W FL-PROOF RD 47 J 1/4W FL-PROOF RD 10 J 1/4W FL-PROOF RD 10 J 1/4W	
R226 R227 R230 R231, 232 R234		RN14BK2E5600F R014AB2E680JTS R014BK2E220F R014BK2E3301F R014BK2C1002F	RN 560.0 F 1/4W FL-PROOF RD 68 J 1/4W RN 22.0 F 1/4W RN 3.30K F 1/4W RN 10.0K F 1/6W	
R237 R241 R246 R248, 249 R251, 252		RN14BK2C4701F R014BK2C4701F R014AB2E100JTS R014BK2C1001F R014BK2C1503F	RN 4.70K F 1/6W RN 4.70K F 1/6W FL-PROOF RD 10 J 1/4W RN 1.00K F 1/6W RN 150K F 1/6W	
VR1, 2 VR3		R12-1616-05 R31-0010-05	TRIMMING POT (1K) IDLE ADJ. VARIABLE RESISTOR(100K) VOLUME	P EGLYX T
K1 K1 K1 K2 K3		S51-2052-05 S76-0015-05 S76-0013-05 S76-0005-05 S76-0009-05	MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY	
S1		S31-2322-05	SLIDE SWITCH AC VOLTAGE SEL	YM
D1, 2 D1, 2 D5, 6 D5, 6 D9, 10 D9, 10 D11 -14		HSS104 HSS133 HSS20S(B2) R020JS(B2) HSS104 HSS133 S5688B	DIODE DIODE ZENER DIODE ZENER DIODE DIODE DIODE DIODE	

2KA-2060R
3KA-3060R
△ indicates safety critical components.

* New Parts
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3

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C117 C118, 119 C120 C121, 122 C123		C804KW1A101M C045FSL1H221J C045FSL1H221J C045FSL1H221J C045FSL1H221J	ELECTR0 100V CERAMIC 220PF J CERAMIC 0.010UF P ELECTR0 50WV ELECTR0 25WV	
C126 C127 C128 C129 C130		C092FM1H683JEL C045FSL1H473Z C045FSL1H473Z C045FSL1H473Z C045FSL1H473Z	MYLAR 0.068UF J CERAMIC 0.047UF Z ELECTR0 50WV BACKUP 0.047F 5.5WV ELECTR0 10WV	
C131 C132 C142, 143 C144 C145, 146		C045FSL1H103Z C045FSL1H221J C045FSL1H103Z C092FM1H103JEL C91-1488-05	CERAMIC 0.010UF Z CERAMIC 220PF J CERAMIC 0.010UF Z MYLAR 0.010UF J MF 6800PF 250VAC	
C147, 148 C151 C152 C153 C159		C045FSL1H101M C045FSL1H101M C092FM1H103JEL C092FM1H103JEL C045FSL1H101M	ELECTR0 10WV ELECTR0 10WV MYLAR 0.010UF J MYLAR 0.010UF J ELECTR0 50WV	
C160 C163 C164 C165 C167		C045FSL1H100M C90-3568-05 C045FSL1H101M C045FSL1H101M C092FM1H104JEL	NP-ELEC 10UF ELECTR0 10UF 25WV ELECTR0 1.0UF 50WV ELECTR0 1.0UF 35WV MYLAR 0.10UF J	
C177 C185 C188 C220 C221, 222		C092FM1H102JEL C092FM1H123JEL C045FSL1H103Z C045FSL1H103Z C092FM1H104JEL	MYLAR 1000PF J MYLAR 0.012UF J CERAMIC 0.010UF Z ELECTR0 100WV MYLAR 0.10UF J	
C225 C226 C227, 228 C229, 230 C231, 232		C092FM1H102JEL C045FSL1H561K C045FSL1H181J C092FM1H101K C045FSL1H331J	MYLAR 1000PF J CERAMIC 560PF K CERAMIC 180PF J MYLAR 100PF K CERAMIC 330PF J	
J1 J2 J3 J4		E13-0235-05 E13-0820-05 E13-0446-05 E70-0018-05 E70-0018-05	PHONO JACK(2P) PHONO PHONO JACK(8P) LINE IN/TAPE 1 PHONO JACK(4P) TAPE 2/MONITOR SCREW TERMINAL BOARD SPEAKERS SCREW TERMINAL BOARD SPEAKERS	EGLYX T
J4 J5 J6 J7 J8, 9		E70-0019-05 E11-0188-05 E03-0506-05 E03-0147-05 E03-0109-05	SCREW TERMINAL BOARD SPEAKERS MINIATURE PHONE JACK S.CONTROL AC OUTLET AC OUTLET AC OUTLET	L P PY EGLM T
F3 F3 F3 F4 F5 F5 F5 F6		F04-1026-05 F06-1022-05 F06-1022-05 F05-2525-05 F04-5022-05 F06-2021-05 F06-2021-05 F06-2021-05	FUSE (UL) (250V 1A) FUSE (SEMK0) (250V TIAL) FUSE (SEMK0) (250V TIAL) FUSE (SEMK0) (250V T2.5AL) FUSE (UL) (125V 5A UL) FUSE (SEMK0) (250V T2AL) FUSE (SEMK0) (250V T2AL) FUSE (SEMK0) (250V T2AL)	
-		J11-0098-05	WIRE CLAMPER	

2KA-2060R
3KA-3060R
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PARTS LIST

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Ref. No. 参照番号	Address New 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C5 , 6 C7 , 8 C9 , 10 C11 , 12 C15 , 26	*	CK45FB1H681K C992FM1H123JEL C992FM1H332JEL CE04KW1V100M CC45FSL1H151J CC45FSL1H151J	CERAMIC MYLAR MYLAR ELECTRØ CERAMIC CERAMIC	K J J 35WV J
C27 , 28 C29 , 30 C31 , 32 C33 , 34 C35 , 36		CK45FB1H471K CC45FSL1H331J C992FM1H683JEL CE04KW2A010M CC45FSL1H101J CC45FSL1H101J	CERAMIC CERAMIC MYLAR ELECTRØ CERAMIC CERAMIC	K J J 100WV J
C37 , 38 C39 , 40 C43 , 46 C47 , 48 C49 , 50		CC45FSL1H560J CC45FSL1H101J CC45FSL1H121J CK45FF1H103Z C992FM1H104JEL CC45FSL1H101J	CERAMIC CERAMIC CERAMIC CERAMIC MYLAR CERAMIC	J J J Z J
C55 , 56 C57 , 60 C61 , 62 C65 , 68 C75 , 76		CK45FB1H222K C992FM1H223JEL CK45FB1H102K C992FM1H104JEL CC45FSL1H101J CC45FSL1H101J	CERAMIC MYLAR CERAMIC CERAMIC MYLAR CERAMIC	K J K J J
C77 , 78 C85 , 86 C91 , 92 C93 , 94 C101 , 102		CE04KW1A101M CC45FSL1H331J CE04KW2A010M CE04KW2A2H2M CE04KW1E101M C992FM1H104JEL	ELECTRØ CERAMIC ELECTRØ ELECTRØ ELECTRØ MYLAR	10WV J 100WV 100WV 25WV J
C104 C105 , 106 C113 C115 C117		CE04KW1C101M CE04KW1A101M C992FM1H221J CK45FE2H103P C90-3561-05 CE04KW1E102M C992FM1H683JEL	MYLAR ELECTRØ CERAMIC CERAMIC ELECTRØ ELECTRØ MYLAR	16WV K 16WV 100UF 10WV J
C118 , 119 C120 C121 , 122 C123 C126	*	CC45FSL1H221J CK45FE2H103P C90-3561-05 CE04KW1E102M C992FM1H683JEL CK45FF1H473Z CE04KW1H010M C90-1827-05 CE04KW1A101M CK45FF1H103Z	CERAMIC CERAMIC ELECTRØ ELECTRØ MYLAR CERAMIC BACKUP ELECTRØ CERAMIC	J P 50WV 25WV J Z 50WV 5.5WV 10WV Z
C127 C128 C129 C130 C131		CC45FSL1H221J CK45FF1H103Z C992FM1H103JEL C91-1488-05 CE04KW1A101M CE04KW1A101M	CERAMIC CERAMIC MYLAR MF ELECTRØ ELECTRØ	J J J 250VAC 10WV J
C132 C142 , 143 C144 C145 , 146 C147 , 148		CC45FSL1H221J CK45FF1H103Z C992FM1H103JEL C91-1488-05 CE04KW1A101M CE04KW1A101M	CERAMIC CERAMIC MYLAR MF ELECTRØ ELECTRØ	J J J 250VAC 10WV J
C151 C152 C159 C160 C163		CE04KW1A101M C992FM1H103JEL CE04KW1H010M CE04KW1E100M C90-3566-05 CE04KW1H010M CE04KW1V100M	ELECTRØ MYLAR ELECTRØ NP-ELEC ELECTRØ ELECTRØ ELECTRØ	10WV J 100UF 10UF 50WV 50WV 50WV 35WV
C165 C177 C185 C218	*	CE04KW1H010M C992FM1H102JEL C992FM1H123JEL CK45FF1H103Z CK45FF1H103Z	ELECTRØ MYLAR MYLAR CERAMIC CERAMIC	50WV J 1000PF 0.012UF 0.010UF Z

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Ref. No. 参照番号	Address New 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
D15 , 23 D15 , 23 D24 D25		HSS104 ISS133 HZSS.1S(B2) RD5.1JS(B2) HSS104	DIODE DIODE ZENER DIODE ZENER DIODE DIODE	
D25 D25 D28 - 37 D28 - 37 D40		ISS133 D5SBA20F03 HSS104 ISS133 HZSS.1S(B2) RD5.1JS(B2)	DIODE DIODE DIODE DIODE ZENER DIODE ZENER DIODE	
D40 D41 - 51 D41 - 51 D52 , 53 D52 , 53		RD5.1JS(B2) HSS104 ISS133 HSS104 HSS131	ZENER DIODE DIODE DIODE DIODE DIODE	
IC1 IC2 IC3 IC4 IC5		NJM4580D-D TC9164N TC9162N M37470M4-189SP S-80740AL	IC(OP AMP X2) IC(16CH BILATERAL SELECTOR SW) IC(ANALOG SWITCH ARRAY) MI-COM IC IC(VOLTAGE DETECTOR)	
IC6 Q1 - 4 Q5 - 8 Q9 - 12 Q13 , 14		TAB409S 2SC1845(F,E) 2SA992(F,E) 2SC1845(F,E) 2SC2878(B) 2SD2012	IC(MOTOR CONTROL) TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
Q21 Q21 Q22 Q22 Q23		2SD2012 2SD2061(F,E) 2SB1370(E,F) 2SB1375 2SA992(F,E) 2SC1845(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
Q24 Q25 Q26 Q27 Q27		2SC1845(F,E) 2SA992(F,E) 2SC1845(F,E) 2SA1048(Y,GR) 2SA1309A(G,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
Q28 , 29 Q28 , 29 Q30 , 31 Q32 Q32		2SC458(Y,GR) 2SC3511A(G,R) 2SC2003(L,K) 2SC2458(Y,GR) 2SC3511A(G,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
Q33 Q34 Q34 Q35 Q35		2SC1845(F,E) DTC124ES UN4212 DTA124ES UN4112	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q36 Q36 Q37 , 38 Q51 , 52 Q53 , 54 Q55 , 56		2SD2012 2SD2061(F,E) 2SC1845(F,E) 2SD2254BT*5 2SB1492BT*5 2SC4137F19(V,W)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
AUDIO UNIT (X09-389X-XX)				
C1 , 2 C3 , 4		CE04KW1V100M CC45FSL1H101J	ELECTRØ CERAMIC	10UF 100PF J

L:Scandinavia K:USA P:Canada R:Mexico
Y:PX(Far East, Hawaii) T:England E:Europe G:Germany
Y:AFES(Europe) X:Australia M:Other Areas

2KA-2060R
3KA-3060R
A indicates safety critical components.

PARTS LIST

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Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
R230			RN14BK2E22R0F	22.0 F 1/4W	
R231, 232			RN14BK2E3301F	3.30K F 1/4W	
R237			RN14BK2C4701F	4.70K F 1/6W	
R246			RD14AB2E100JTS	FL-PROOF RD 10 J 1/4W	
R248, 249			RN14BK2C1001F	1.00K F 1/6W	
R251, 252			RN14BK2C1503F	150K F 1/6W	
VR1, 2		*	R12-1616-05	TRIMMING POT. (1K) ADJ.	
VR3			R31-0010-05	VARIABLE RESISTOR (100K) VOLUME	
K1			S51-2052-05	MAGNETIC RELAY	P
K1			S51-2094-05	MAGNETIC RELAY	EGLYMX
K1			S51-2094-05	MAGNETIC RELAY	T
K2			S76-0005-05	MAGNETIC RELAY	
K3			S76-0009-05	MAGNETIC RELAY	
Δ S1			S31-2322-05	SLIDE SWITCH AC VOLTAGE SEL	YM
D1, 2			HSS104	DIODE	
D1, 2			HSS133	DIODE	
D5, 6			HZS15S(B)	ZENER DIODE	
D5, 6			RD15JS(B)	ZENER DIODE	
D9, 10			HSS104	DIODE	
D9, 10			LS5133	DIODE	
D11, 14			S56888	DIODE	
D15, 23			HSS104	DIODE	
D15, 23			LS5133	DIODE	
D24			HZS5.1S(B2)	ZENER DIODE	
D24			RD5.1JS(B2)	ZENER DIODE	
D25			HSS104	DIODE	
D25			LS5133	DIODE	
D26, 37			D5SRA20F03	DIODE	
D26, 37			HSS104	DIODE	
D28, 37			LS5133	DIODE	
D40			HZS5.1S(B2)	ZENER DIODE	
D40			RD5.1JS(B2)	ZENER DIODE	
D41, 51			HSS104	DIODE	
D41, 51			LS5133	DIODE	
D52, 53			HSS104A	DIODE	
D52, 53			LS5131	DIODE	
IC1			NJM4580D-D	IC (OP AMP X2)	
IC2			TC9164N	IC (16CH BILATERAL SELECTOR SW)	
IC3			TC9162N	IC (ANALOG SWITCH ARRAY)	
IC4			M37470M4-1895P	M1-COM IC	
IC5			S-80740AL	IC (VOLTAGE DETECTOR)	
IC6			TAB409S	IC (MOTOR CONTROL)	
Q1, 4			2SC1845(F, E)	TRANSISTOR	
Q5, 8			2SA992(F, E)	TRANSISTOR	
Q9, 12			2SC1845(F, E)	TRANSISTOR	
Q13, 14			2SC2878(B)	TRANSISTOR	
Q21			2SD2012	TRANSISTOR	
Q22			2SD2061(E, F)	TRANSISTOR	
Q22			2SB1370(F, F)	TRANSISTOR	
Q27			2SA1048(V, GR)	TRANSISTOR	
Q27			2SA1309A(G, R)	TRANSISTOR	
Q28, 29			2SC456(Y, GR)	TRANSISTOR	
Q28, 29			2SC3511A(G, R)	TRANSISTOR	
Q30, 31			2SC2003(L, K)	TRANSISTOR	

USA Mexico
Canada Europe
England Germany
Australia Other Areas

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Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C220			C604KW2A010M	ELECTR0 1.00UF 100WV	
C221, 222			C492EM1H104JEL	MYLAR 0.100UF J	
C225			C922EM1H102JEL	MYLAR 1000PF J	
C226			C645FB1H561K	CERAMIC 560PF K	
C227, 228			C645FSL1H181J	CERAMIC 180PF J	
C229, 230			CF92RV1H101K	MF 100PF K	
C231, 232			CC45FSL1H331J	CERAMIC 330PF J	
J1			E13-0235-05	PHONE JACK (2P) PHONE	
J2			E13-0820-05	PHONE JACK (8P) LINE IN/TAPE 1	
J3			E13-0446-05	PHONE JACK (4P) TAPE 2/MONITOR	
J4			E70-0018-05	SCREW TERMINAL BOARD SPEAKERS	EGPYMX
J4			E70-0018-05	SCREW TERMINAL BOARD SPEAKERS	T
J4			E70-0019-05	SCREW TERMINAL BOARD SPEAKERS	L
J5			E11-0188-05	MINIATURE PHONE JACK S.CONTROL	PY
J6			E03-0306-05	AC OUTLET	EGLM
J7			E03-0147-05	AC OUTLET	T
Δ J8, 9		*	E03-0109-05	AC OUTLET	
Δ F3			F04-1026-05	FUSE (UL) (250V 1A)	P
Δ F3			F04-1022-05	FUSE (SEM0) (250V 1A)	EGLYMX
Δ F3			F06-1022-05	FUSE (SEM0) (250V 1A)	T
Δ F4			F05-2525-05	FUSE (SEM0) (250V T2.5AL)	EGL
Δ F5			F05-4028-05	FUSE (UL) (125V 4A)	P
Δ F5			F06-2021-05	FUSE (SEM0) (250V T2AL)	EGLYMX
Δ F6			F06-2021-05	FUSE (SEM0) (250V T2AL)	YM
-			J11-0098-05	WIRE CLAMPER	
CN15, 16			J13-0075-05	FUSE CLIP	
CN17, 18			J13-0075-05	FUSE CLIP	
CN19, 20			J13-0075-05	FUSE CLIP	
CN21, 22			J13-0075-05	FUSE CLIP	
X1			L78-0290-05	RESONATOR (8MHZ)	
Δ R67, 68			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W	
Δ R69, 70			RD14AB2E472JTS	FL-PROOF RD 4.7K J 1/4W	
Δ R71, 72			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W	
Δ R77, 78			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W	
Δ R79, 80			RD14AB2E101JTS	FL-PROOF RD 100 J 1/4W	
R81, 82			RN14BK2C1101F	RN 1.10K F 1/6W	
R85, 86			RN14BK2E1003F	RN 100K F 1/4W	
R89, 92			RS14GB3DR33JKW	FL-PROOF RS 0.33 J 2W	
R93, 94			RD14AB2E101JTS	FL-PROOF RD 100 J 1/4W	
R95, 96			RD14AB2E392JTS	FL-PROOF RD 3.9K J 1/4W	
R97, 98			RD14AB2E102JTS	FL-PROOF RD 1.0K J 1/4W	
Δ R103, 104			RS14DB3A100JTE	FL-PROOF RS 10 J 1W	
Δ R103, 154			RS14DB3D561JTE	FL-PROOF RS 560 J 2W	
Δ R180			RS14DB3D3021JTE	FL-PROOF RS 820 J 2W	
R183			RS14DB3A350JTE	FL-PROOF RS 33 J 1W	P
R183			RS14DB3A560JTE	FL-PROOF RS 56 J 1W	EGLYMX
R183			RS14DB3A560JTE	FL-PROOF RS 56 J 1W	T
R186			RD14AB2E470JTS	FL-PROOF RD 47 J 1/4W	
R187			RD14AB2E100JTS	FL-PROOF RD 10 J 1/4W	
R190			RD14AB2E100JTS	FL-PROOF RD 10 J 1/4W	
R226			RN14BK2E5600F	RN 560.0 F 1/4W	
R227			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W	

USA Mexico
Canada Europe
England Germany
Australia Other Areas

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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Destination 仕向
Q32		2SC2458(Y,GR)	TRANSISTOR	
Q33		2SC3311A(Q,R)	TRANSISTOR	
Q34		2SC1845(F,E)	TRANSISTOR	
Q35		DTA124ES	DIGITAL TRANSISTOR	
Q36		UN4112	TRANSISTOR	
Q37		2SD2012	TRANSISTOR	
Q38		2SD2061(E,F)	TRANSISTOR	
Q39		2SC1845(F,E)	TRANSISTOR	
Q40		2SD2340BT*5	TRANSISTOR	
Q41		2SB1531BT*5	TRANSISTOR	
Q42		2SC4137F19(V,H)	TRANSISTOR	
CONTROL UNIT(X11-00X)				
C1		CE04KW1HR33M	ELECTR	
C2		CC45FSL1H101J	CERAMIC	
C3		CF92FV1H101K	MF	
C4		CE04KW1HR33M	ELECTR	
C5		CE04KW1V100M	ELECTR	
C6		CF92FV1H223J	MF	
C7		CE04KW1E470M	ELECTR	
C8		CF92FV1H561J	MF	
C9		CK45FB1H561K	CERAMIC	
C10		CK45FB1H102K	CERAMIC	
C11		CF92FV1H561J	MF	
C12		CK45FB1H561J	CERAMIC	
C13		CK45FF1H103Z	CERAMIC	
C14		CF92FV1H101K	MF	
C15		CE04KW1E470M	ELECTR	
C16		CK45FF1H103Z	CERAMIC	
C17		CC45FSL1H221J	CERAMIC	
C18		CE04KW1C100M	ELECTR	
C19		CK45FF1H103Z	CERAMIC	
C20		E11-0190-05	PHONE JACK	
C21		RS14KB3D151JTE	FL-PROOF RS	
C22		R06-3057-05	VARIABLE RESISTOR(BASS/TREBLE)	
C23		R05-3030-05	VARIABLE RESISTOR(BALANCE)	
C24		S42-2138-05	PUSH SWITCH	
C25		S40-1064-05	PUSH SWITCH	
C26		1SS133	DIODE	
C27		B30-1294-05	LED	
C28		NJM45650-D	IC(OP AMP X2)	
C29		2SA934(Q,R)	TRANSISTOR	
C30		2SC2060(Q,R)	TRANSISTOR	
C31		W02-1153-05	REMOTE SENSOR	

L:Scandinavia
 Y:PY(Far East, Hawaii)
 V:AAFE(S)(Europe)

K:USA
 T:England
 X:Australia

P:Canada
 E:Europe
 M:Other Areas

R:Mexico
 G:Germany

2KA-2060R
 3KA-3060R

△ indicates safety critical components.

SPECIFICATIONS

KA-3060R(For U. K. and Europe)

Continuous rated power output	
(DIN) 1 kHz, at 8 Ω	60 W + 60 W
at 4 Ω	80 W + 80 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	60 W + 60 W
at 4 Ω	80 W + 80 W
Dynamic power	64 W (8 Ω)
	75 W (6 Ω)
	90 W (4 Ω)
Damping factor	40 (50 Hz)
Total harmonic distortion	
.....	0.06% (20 Hz ~ 20,000 Hz, 50 W, 8 Ω)
.....	0.02% (1 kHz, 50 W, 8 Ω)
Intermodulation distortion	0.05% (50 W, 8 Ω)
(70 Hz : 7 kHz = 4 : 1)	
Frequency response	
CD/TUNER/TAPE1, 25 Hz ~ 100 kHz, +0 dB, -3 dB	
PHONO 'RIAA' response.....20 Hz ~ 20 kHz,	
+0.3 dB, -0.3 dB	
Maximum input level	
PHONO (MM) 130 mV, 0.5% T.H.D. at 1 kHz	
Signal to noise ratio	
PHONO (MM) 76 dB (IHF '66)	
77 dB (IHF '78)	
CD/TUNER/TAPE1, 2 103 dB (IHF '66)	
81 dB (IHF '78)	
PHONO (MM).....61 dB (DIN, 50 mW output)	
CD/TUNER/TAPE1, 263 dB (DIN, 50 mW output)	
Input sensitivity/impedance	
PHONO (MM)2.5 mV/47 k Ω	
CD/TUNER/TAPE1, 2200 mV/47 k Ω	
Tone control	
BASS ± 10 dB (at 100 Hz)	
TREBLE..... ± 10 dB (at 10 kHz)	
Loudness control	
(VOLUME at -30 dB level)+6 dB (100 Hz)	
+3 dB (10 kHz)	
Output level/impedance	
TAPE REC200 mV/600 Ω	

General

Power consumption	190 W
AC outlets	
For U.K.	
SWITCHED	2; (Total 200 W max.)
For Europe	
SWITCHED	3; (Total 200 W max.)
Dimensions	W: 440 mm (17-5/16")
	H: 133 mm (5-1/4")
	D: 303 mm(11-15/16")
Weight (net)	7.0 kg (15.4 lb)

KA-2060R(For U. K. and Europe)

Continuous rated power output	
(DIN) 1 kHz, at 8 Ω	50 W + 50 W
at 4 Ω	65 W + 65 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	50 W + 50 W
at 4 Ω	65 W + 65 W
Dynamic power	54 W (8 Ω)
	60 W (6 Ω)
	70 W (4 Ω)
Damping factor	40 (50 Hz)
Total harmonic distortion	
.....	0.06% (20 Hz ~ 20,000 Hz, 40 W, 8 Ω)
.....	0.02% (1 kHz, 40 W, 8 Ω)
Intermodulation distortion	0.05% (40 W, 8 Ω)
(70 Hz : 7 kHz = 4 : 1)	
Frequency response	
CD/TUNER/TAPE1, 25 Hz ~ 100 kHz, +0 dB, -3 dB	
PHONO 'RIAA' response.....20 Hz ~ 20 kHz,	
+0.3 dB, -0.3 dB	
Maximum input level	
PHONO (MM) 110 mV, 0.5% T.H.D. at 1 kHz	
Signal to noise ratio	
PHONO (MM) 75 dB (IHF '66)	
77 dB (IHF '78)	
CD/TUNER/TAPE1, 2 103 dB (IHF '66)	
81 dB (IHF '78)	
PHONO (MM).....61 dB (DIN, 50 mW output)	
CD/TUNER/TAPE1, 263 dB (DIN, 50 mW output)	
Input sensitivity/impedance	
PHONO (MM)2.5 mV/47 k Ω	
CD/TUNER/TAPE1, 2200 mV/47 k Ω	
Tone control	
BASS ± 10 dB (at 100 Hz)	
TREBLE..... ± 10 dB (at 10 kHz)	
Loudness control	
(VOLUME at -30 dB level)+6 dB (100 Hz)	
+3 dB (10 kHz)	
Output level/impedance	
TAPE REC200 mV/600 Ω	

General

Power consumption	170 W
AC outlets	
For U.K.	
SWITCHED	2; (Total 200 W max.)
For Europe	
SWITCHED	3; (Total 200 W max.)
Dimensions	W: 440 mm (17-5/16")
	H: 133 mm (5-1/4")
	D: 303 mm(11-15/16")
Weight (net)	6.5 kg (14.3 lb)

KA-2060R/3060R

SPECIFICATIONS

KA-3060R(For other countries)

Continuous rated power output	
From 20 Hz to 20,000 Hz 0.06% T.H.D.	
at 8 Ω	50 W + 50 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	60 W + 60 W
at 4 Ω	80 W + 80 W
Dynamic power	
	64 W (8 Ω)
	75 W (6 Ω)
	90 W (4 Ω)
Damping factor	
	40 (50 Hz)
Total harmonic distortion	
..... 0.06% (20 Hz ~ 20,000 Hz, 50 W, 8 Ω)	
..... 0.02% (1 kHz, 50 W, 8 Ω)	
Intermodulation distortion	
	0.05% (50 W, 8 Ω)
(70 Hz : 7 kHz = 4 : 1)	
Frequency response	
CD/TUNER/TAPE1, 2 5 Hz ~ 100 kHz, +0 dB, -3 dB	
PHONO 'RIAA' response	
	20 Hz ~ 20 kHz,
	+0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM) 130 mV, 0.5% T.H.D. at 1 kHz	
Signal to noise ratio	
PHONO (MM)	
	76 dB (IHF '66)
	77 dB (IHF '78)
CD/TUNER/TAPE1, 2	
	103 dB (IHF '66)
	81 dB (IHF '78)
Input sensitivity/impedance	
PHONO (MM) 2.5 mV/47 k Ω	
CD/TUNER/TAPE1, 2 200 mV/47 k Ω	
Tone control	
BASS ± 10 dB (at 100 Hz)	
TREBLE ± 10 dB (at 10 kHz)	
Loudness control	
(VOLUME at -30 dB level)	
	+6 dB (100 Hz)
	+3 dB (10 kHz)
Output level/impedance	
TAPE REC 200 mV/600 Ω	

General

Power consumption	190 W
AC outlets	
SWITCHED	3; (Total 200 W max.)
	For Australia 1; (Total 200 W max.)
Dimensions	
	W: 440 mm (17-5/16")
	H: 133 mm (5-1/4")
	D: 303 mm (11-15/16")
Weight (net)	
	7.0 kg (15.4 lb)

KA-2060R(For other countries)

Continuous rated power output	
From 20 Hz to 20,000 Hz 0.06% T.H.D.	
at 8 Ω	40 W + 40 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	50 W + 50 W
at 4 Ω	65 W + 65 W
Dynamic power	
	54 W (8 Ω)
	60 W (6 Ω)
	70 W (4 Ω)
Damping factor	
	40 (50 Hz)
Total harmonic distortion	
..... 0.06% (20 Hz ~ 20,000 Hz, 40 W, 8 Ω)	
..... 0.02% (1 kHz, 40 W, 8 Ω)	
Intermodulation distortion	
	0.05% (40 W, 8 Ω)
(70 Hz : 7 kHz = 4 : 1)	
Frequency response	
CD/TUNER/TAPE1, 2 5 Hz ~ 100 kHz, +0 dB, -3 dB	
PHONO 'RIAA' response	
	20 Hz ~ 20 kHz,
	+0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM) 110 mV, 0.5% T.H.D. at 1 kHz	
Signal to noise ratio	
PHONO (MM)	
	75 dB (IHF '66)
	77 dB (IHF '78)
CD/TUNER/TAPE1, 2	
	103 dB (IHF '66)
	81 dB (IHF '78)
Input sensitivity/impedance	
PHONO (MM) 2.5 mV/47 k Ω	
CD/TUNER/TAPE1, 2 200 mV/47 k Ω	
Tone control	
BASS ± 10 dB (at 100 Hz)	
TREBLE ± 10 dB (at 10 kHz)	
Loudness control	
(VOLUME at -30 dB level)	
	+6 dB (100 Hz)
	+3 dB (10 kHz)
Output level/impedance	
TAPE REC 200 mV/600 Ω	

General

Power consumption	170 W
AC outlets	
SWITCHED	3; (Total 200 W max.)
	For Australia 1; (Total 200 W max.)
Dimensions	
	W: 440 mm (17-5/16")
	H: 133 mm (5-1/4")
	D: 303 mm (11-15/16")
Weight (net)	
	6.5 kg (14.3 lb)

Note : KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be change without notice.

Note :

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the general market(M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams and information on regional component variations through use of parts list.

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